

ASTONISHING DISCOVERIES ABOUT YOUR BLOOD

Professor Reichert's Experiments With Blood Crystals, Which Show the Orang-Outang Related to the White, the Gorilla to the Black, the Seal to the Bear, Seem to Prove Evolution, and May Revolutionize Murder Trials.



DR. EDWARD TYSON Reichert, of the University of Pennsylvania, has invented a new method whereby he classifies and identifies the blood crystals of every living animal. He has examined the blood crystals of 2,800 creatures, taking their blood without killing them, and has prepared very interesting microphotographs of all of them.

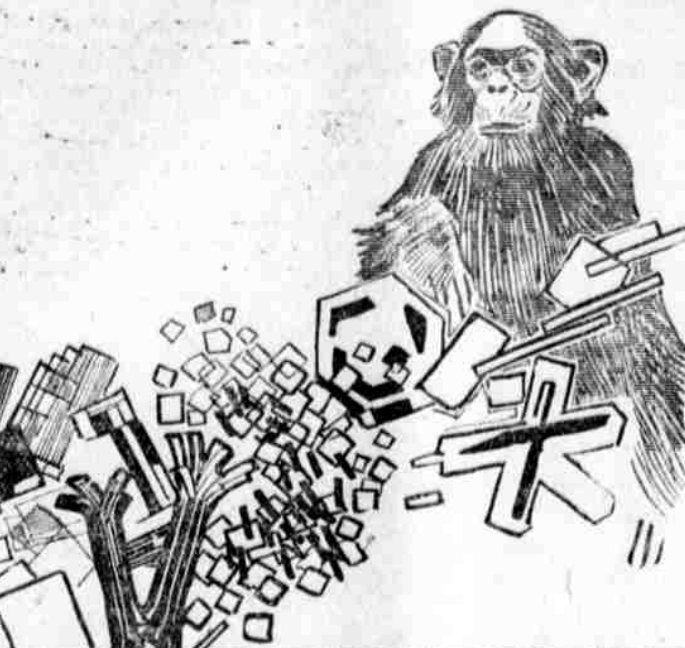
These photographs illustrate and prove the theory of evolution, and are valuable for many other reasons. They show the relationship of man to the ape, of the ape to the lemur, a monkey-like little animal which is a common ancestor of man and the ape, and the relationship of the lemur to many of the other animals, down to the lowest, including the crab.

These photographs show, among many other things, a close resemblance of the blood crystals of the white man to those of that proud anthropoid ape, the orang-outang, while the blood crystals of the negro are more closely allied to those of that truculent African anthropoid ape, the gorilla.

The crystals of man are light, rectangular and slender, and those of the orang-outang tend toward the same form. The crystals of the negro are comparatively short and thick, and those of the gorilla are remarkably so. The relationship between closely allied animals is always quickly seen. You can tell at once from the blood, as prepared by Dr. Reichert, that the domestic cat is a close relation of the mountain lion. It is very curious to note the relationship between the horse and the mule, the crystals of the latter being coarser and much more irregular than those of the former.

Many of the crystals have a very strange appearance as compared with those of man. The blood of the ground squirrel, which has a hateful reputation for conveying the bubonic plague in

America, is perhaps the most extraordinary of all in form. The new system of testing and preparing blood will be particularly useful in criminal cases. It will enable the prosecuting authorities to tell not only whether a blood stain is human, but whether it is that of a man or a woman, that of a white or a colored person, and



Experimenting with the Blood of Two Hundred Animals at Once in the University of Pennsylvania.

A South American Monkey Whose Blood Crystals Present Many Astonishing Problems of Evolution.

necessary to devise methods to control the rapidity of crystallization, and also to perfect methods that would not injuriously affect the hemoglobin molecules. To such perfection were these methods developed by Dr. Reichert and Professor Brown that it was quite possible for them to promote or retard crystallization at will. By promoting crystallization they obtained crystals from small quantities of blood in which, on account of their rapid crystallizability, it has heretofore been impossible, or at least exceedingly difficult, to develop them.

The specimens were "fixed" in gelatin and reproduced for study and comparison first by line drawings made by Charles Travis, Ph. D., of the Department of Geology and Mineralogy, in the University of Pennsylvania, and then made permanent by the use of the photomicroscope. Where difficulties arose from similarities of color screens were used, giving sharp outlines to the subjects.

The blood of all the vertebrates is red, but that of the lower animals is of various colors. The blood of insects is colorless.

While it is true that no man has actually "blue blood," it can be shown that he had distant ancestors with that he had distant ancestors with

Concerning Fools, Hearts and Women.

RECENTLY, large portions of the Hebrew text of "Ecclesiastes," which is included in our modern Apocrypha, have been discovered, and some piquant renderings of the book's brighter side have been given by Dr. Oesterly, of England. The book was written two hundred years before Christ by the son of Sir, a Jerusalem Jew, and no more profound philosopher has lived since. Many of the more modern sapient sayings resemble Sir's ideas very much, but the philosophy of all ages has much the same foundation.

Gossips, gluttons, spinsters, and malicious women are among the characters prominent enough even in these remote days for the philosopher's consideration.

"The heart of fools is in their mouths, but the mouth of the wise is in their heart," wrote Sir, dividing, as usual, all humanity into those who follow wisdom and those who follow foolishness. Education, common sense, and good manners are regarded merely as different manifestations or degrees of human wisdom, which, in its turn, differed only in degree from divine wisdom.

"For example," explains Dr. Oesterly, "according to Sir, a man is 'wise' if he devotes his time to learning, but so

also is the man who does not stick his nose into his neighbor's ribs at dinner, just as in the Talmud he is described as being polite at table. Not as Sir. With parts from thy house when thou marriest thy daughter; but," he adds kindly, "give her to a sensible man."

On what the lecturer describes as "the delicate and fascinating subject of ladies" the author of "Ecclesiastes" had a dinner table, and presented his readers with something like a complete guide to fashionable manners in Jerusalem.

"When thou sittest at the table of a great man open not thy mouth too wide, and say not, 'What a glorious word' was the lecturer's translation of one useful maxim."

"Stretch not out thy hand whither-soever thine eye goeth, and thrust not thyself with it into the dish," was a piece of advice suggesting to the doctor that "there must have been queer

like that of a bear."

"Give me any wound but a heart wound, and any wickedness but a spread" was the lecturer's translation of one useful maxim.

"I would rather dwell with a lion or a dragon than live with a malicious woman. The malice of a woman darkens her appearance and blackens her face piece of advice suggesting to the doctor that "there must have been queer

"All malice is but little compared with going on sometimes."

"Eat like a man," says the sage also. "Eat like a man," says the sage also. "Eat like a man," says the sage also. "Eat like a man," says the sage also.

The Odd Egg of the Sea Urchin, Concerning Whose Blood Professor Reichert Made Some Strange Discoveries.

The Laurentian Period been told that their descendants would afterwards, in the Cambrian Period, produce a many-celled worm-like organism possessed of skin and intestine, muscles and nerves, kidneys and blood vessels, they certainly would not have believed it; nor, again, would these worms have believed, had they been told that their descendants would develop into skullless vertebrates, such as the Amphioxus; nor would these animals have credited that their posterity would ever become skinned animals. Our Silurian primitive-fish ancestors would have been equally hard to convince that their offspring of the Devonian Period would acquire amphibian form, and yet later, in the Triassic Period, would appear as mammals; the latter, again, would have deemed it impossible that, in Tertiary times, a very late descendant of theirs would acquire human form, and would gather the splendid fruits of the tree of knowledge. All these would have answered: "We shall never change, nor shall we ever understand the history of our evolution."

At any rate the people of to-day are beginning to understand the humble origin they came from. Dr. Reichert has proved by his blood crystals the theory of marine origin. He has traced evolution every inch of the way through more than 2,800 specimens of life as shown in living things.

He has traced life in every stage from the mollusk to man and in every case the blood test proved only one thing—a common source for all life.

The great wide circle called life has been narrowed and contracted by Dr. Reichert until he is prepared to say with authority whence came a certain specimen of blood.

Scientists bent upon solving the most obscure problems will grasp the significance of Dr. Reichert's discoveries at their full worth. Already from all parts of the world have come congratulations from students and savants. In the practical world, in the field of criminal investigation, in the everyday practice of medicine, these researches will have great value.



THE CHARACTERISTIC CRYSTAL OF THE WHITE MAN'S BLOOD



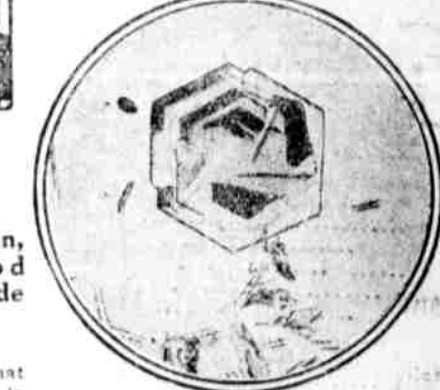
THE CRYSTALS IN AN ORANG-OUTANG'S BLOOD, THE NEAREST ANIMAL NEIGHBOR OF THE WHITE



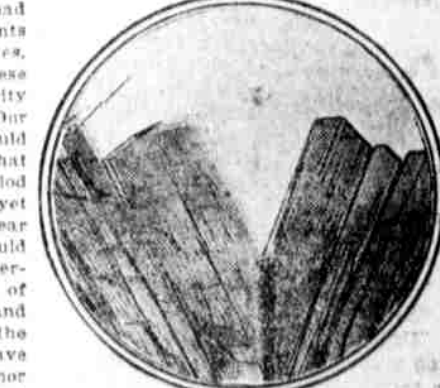
BLOOD CRYSTALS OF A GORILLA WHOSE CHARACTERISTICS SHOW THE ANIMAL NEAREST NEIGHBOR TO THE BLACK



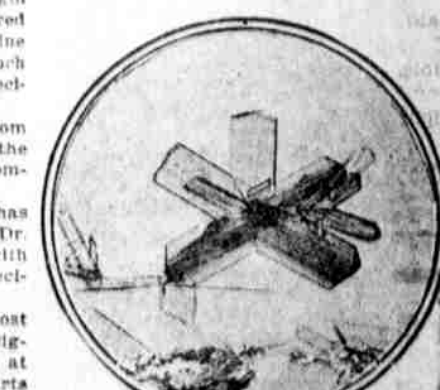
THE BLOOD CRYSTALS WHICH PROVE THE SEAL COUSIN TO THE BEAR.



THE BLOOD CRYSTALS OF THE SOUTH AMERICAN MONKEY WHOSE BLOOD CRYSTALS PRESENT MANY ASTONISHING PROBLEMS OF EVOLUTION.



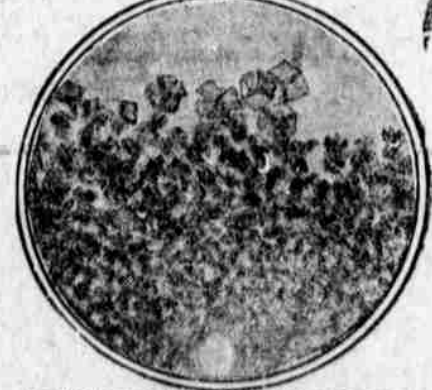
THE COARSE BLOOD CRYSTALS OF THE MULE.



AND THE FINE SYMMETRICAL CRYSTALS OF THE HORSE



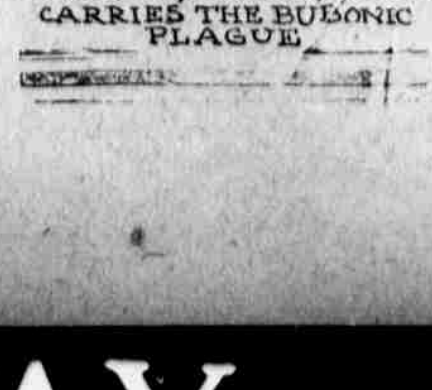
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